

Abstract

• The present invention is directed to a method and apparatus for etching the
interior of a mold. In one implementation of the invention the interior of a mold is coated
with an acid-resistant material. A photosensitive laminate is partially exposed to light,
5 with only those areas that are to be etched being exposed. The laminate is subsequently
developed to remove that portion of the laminate that has been exposed. This removed
portion corresponds to the portion of the mold that is to be etched. After development the
laminate is positioned in the interior of the mold over the acid-resistant coating, and then
portions of the acid-resistant material are abrasively removed. The laminate is lightly
10 wetted in some implementations in order to make it more flexible and stretchable, thereby
allowing it to more readily conform to the interior surface of the mold. The intact
portions of the photosensitive laminate (those portions that were not exposed to the light)
provide protection to the acid-resist material, while the developed and removed portions
of the photosensitive laminate provide little or no protection.